



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN CLIMATE CHANGE &
DEVELOPMENT WITH INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

NCA 203: CLIMATE CHANGE IN THE TROPICS & ARID AND SEMI-ARID ENVIRONMENTS

Date: 25th November, 2013

Time: 8.30 - 10.30 a.m.

INSTRUCTIONS:

- **Answer Question ONE and any other TWO questions.**
- **Sketch maps and diagrams should be used whenever appropriate.**

**NCA 203: CLIMATE CHANGE IN THE TROPICS' ARID AND SEMI – ARID
LANDS**

1. Write explanatory notes on the following:

- (a) Ecological indicators of climate change. (6marks)
- (b) Soil characterising in the tropics. (9 marks)
- (c) Arid & semi-arid environmental constraints. (7marks)
- (d) Climatic characteristics associated with drought and desertification in the tropics. (8marks)

2. Discuss the causes and resultant effects of the destruction of the tropical rainforests. (20 marks)

3. (a) Expound on the differences and similarities between desert and Arid & semi arid environments . (10 marks)

(b) Explain the fact that land use systems in tropics, arid & semi-arid environments influences climate change. (10 marks)

4. Justify the need for technology change on land use systems due to the effects of climate change in arid & semi-arid environments. (20 marks)

5. Critically examine the factors responsible for vulnerability to climate change in the tropics. (20 marks)

6. (a) Explain any five socio-economic factors associated with climate change. (8marks)

(b) Explain the necessary adaptation strategies to enable coping with climate change impact in arid & semi-arid environments parts of Kenya. (12 marks)